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SEPASAL is a database and enquiry service about useful "wild" and semi-domesticated plants of tropical and subtropical drylands, developed and maintained at the Royal Botanic Gardens, Kew. "Useful" includes plants which humans eat, use as medicine, feed to animals, make things from, use as fuel, and many other uses.

Since 2004, there has been a Namibian SEPASAL team, based at the National Botanical Research Institute of the Ministry of Agriculture which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources. By August 2007, over 700 Namibian species had been updated.

Work on updating species information, and adding new species to the database, is ongoing. It may be worth visiting the web site and querying the database to obtain the latest information for this species.

Internet SEPASAL

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 *Display help*In names list include: synonyms vernacular names and display: All names per page*Your query found 1 taxon***Echinochloa pyramidalis (Lam.)A.Hitchc. & Chase [1808]**

Family: POACEAE

Synonyms

Panicum pyramidatum Lam.

Vernacular names

Afrikaans (Namibia)	Olifantsgras [2259] [5083] [5115]
Afrikaans (South Africa)	Limpopo-grass [2259], Olifantsgras [2259]
English	antelope grass [6590]
English (Namibia)	antelope grass [2259] [5115]
English (South Africa)	Limpopo grass [2259], antelope grass [2259]
English (Southern Africa)	Limpopo grass [2182]
English (Zimbabwe)	antelope grass [2259]
German (Namibia)	Stachelhirse [5083] [5115]
Kikuyu (Kenya)	nyeki [6590]
Kyimbila	ikigugu [6590], rinundi [6590]
Ronga (Mozambique)	Chenga [2259] [5480]
Rumanyo (Namibia)	namatura [5115]
Unknown (Mozambique)	Capim do Limpopo [2259], ngobya [5480]

Distribution

Plant origin	Continent	Region	Botanical country
Native	Africa	East Tropical Africa	Kenya [1362] [2259], Tanzania [3] [1362] [2259], Uganda [1362] [2259]
		Northeast Tropical Africa	Chad [2255], Ethiopia [2255], Somalia [1126] [2255], Sudan [1360] [2255]
		South Tropical Africa	Angola [2259] [5126], Malawi [3] [2259], Mozambique [3] [2259] [5480], Zambia [3] [2259] [5481], Zimbabwe [3] [2259] [5125]
		Southern Africa	Botswana [3] [2259] [5104]

			[5186], Cape Province [2182] [5104], Caprivi Strip [3] [5115], Namibia [2259] [5104] [5115], Natal [2182] [2259] [5104], Orange Free State [2255], Swaziland [2182] [5104] [5452], Transvaal [2259] [5104]
		West Tropical Africa	Burkina [2255], Ghana [1360] [2255], Guinea-Bissau [1360] [2255], Ivory Coast [1360] [2255], Mali [1360] [2255], Niger [1360] [2255], Nigeria [1360] [2255], Senegal [3], Sierre Leone [1360] [2255], The Gambia [2255]
		West-Central Tropical Africa	Cameroon [2255], Central African Republic [2255], Congo [2259], Gabon [2259], Rwanda [2255], Zaire [2259]
		Western Indian Ocean	Madagascar [1362] [2182] [5115]
Introduced	Asia-Tropical Australasia Southern America	Malesia Australia Caribbean Mesoamerica Northern South America	Papua New Guinea [2255] Queensland [2255], Western Australia [1808] Guadeloupe [2255] Nicaragua [2255] French Guiana [2255], Venezuela [2255]
Status Unknown	Asia-Temperate	Arabian Peninsula	Saudi Arabia [2255]

ISO countries: South Africa [1362] [2182] [2259]

Descriptors

Category	Descriptors and states
DESCRIPTION	Herb [2255]; Prostrate/Procumbent/Semi-erect [2259]; Tussock Forming/Tufted/Caespitose [2182]; Aquatic [3] [1362] [2182] [2259] [5115]; Erect [3] [2075] [2259]; Terrestrial [2255]; Rhizomatous [3] [1362] [2182] [2259] [6590]; Perennial [1362] [2182] [2259] [5115] [6590]; Stoloniferous [2182]; Plant Height 1-4 m [2075] [2182] [2259] [5104]
SOILS	Sometimes Waterlogged (frequency unknown) [1362] [2259] [6590]; Alluvial Soils [2075]; Poorly Drained [2075] [6590]; Sandy [2075]; Seasonally Waterlogged [2259]; Sandy Loams [2075]; Clays [2075]
HABITAT	Grassland/Forb-Land [2182]; Wooded Grassland [2182]; Wooded Shrubland [2182]; Watercourses [3] [1362] [2182] [2259] [6590]; Lakes/Ponds/Pools [1362] [2259] [5115]; Rangelands/Pastures [6590]; Vlei/Dambo/Seasonally Flooded Grassland [3] [1362] [2182] [2259] [5115]; Altitude 0-2400 m a.s.l. [3] [1362] [2075]
CONSTRAINTS	Weed [2075]; Agricultural Weed [6590]
FURTHER DATA	Botanical Illustration [2259]; Regional Distribution Map [2259]; Grid Map [2182]

SOURCES

SEPASAL Nomenclature Checked

DATASHEET
STATUS

CHEMICAL Unspecified Flavonoids - unspecified parts [2075]; Nutritional Analyses - aerial parts [2259]
ANALYSES

Uses

Major use	Use group	Specific uses
FOOD	Unspecified Parts	vegetables [2075]
	Seeds	famine food [2075] [2255] [6590]; cereals [2182]
ANIMAL FOOD	Aerial Parts	unspecified aerial parts, forage [2259]; unspecified aerial parts, hay/straw [2259]; leaves, cattle [2259]; unspecified aerial parts, game mammals, browse [2259]; unspecified aerial parts, grazing [2182]; unspecified aerial parts, fodder [2182] [5608]; Equidae, fodder [2255]; horses, fodder [2075]; cattle, grazing, wet season [2075]; cattle, grazing [2075]; forage [1126] [6590]; grazing [6590]
MATERIALS	Fibres	stems, thatch [2255]; thatch, huts [2075]
MEDICINES	Respiratory System Disorders	seeds, humans, coughs [2255]; seeds, humans, coughs, oral ingestion [2075]
ENVIRONMENTAL USES	Unspecified Environmental Uses	waterlogged soils [6590]

Picture

None recorded

Notes

NOMENCLATURE/TAXONOMY

Name derivation:

From Greek 'echinos', hedgehog, and chloa, grass, alluding to the bristly hairs on the spikelets in most species. 'Pyramidalis' Latin for pyramid-shaped, descriptive of the panicle shape [2259] .

DISTRIBUTION

Africa:

Southern Africa to tropical Africa and Madagascar [2259] [5115] [5608] .

Angola:

Occurs in the Cuando-Cubango, Cunene, Moxico and Huíla provinces [5126] .

Mozambique:

Occurs in the Gaza, Inhambane, Maputo and Zambezia provinces [5480] .

Namibia:

Occurs only in the far north [5115] .

South Africa:

Transvaal and Natal (Zululand) [2259] .

DESCRIPTION

Habit:

In tropical West Africa it is a perennial, reed-like, up to 15 ft high, rhizomes often floating [1362] .

Habit:

It is a rhizomatous perennial that grows in wet places sometimes water. When on land, the culms are firm, rigid and erect. In water, they are soft, spongy and may be prostrate, rooting from the lower nodes and floating [2259] .

Habitat:

Often floating in open water where it forms part of the 'sudd' [2259] .

Inflorescence:

12-30 cm long, of several, sometimes numerous, spikelets racemes or shortly divided branches up to 12 cm long, decreasing in length upwards, arranged singly or some in pairs, crowded or rather far apart, on a central axis. There are long hairs on the branches at the base of the racemes and sometimes all along. Spikelets 2.5-4 mm long green flushed with or almost entirely dark purple, pointed, awnless, 2-flowered. Glumes unequal. Lower floret usually male. Upper floret bisexual, acute or apiculate, glossy or light brown [2259] .

Leaves:

Bright or bluish green. Sheath rounded, the basal sometimes spongy, occasionally with short transverse veins, glabrous and smooth, or slightly scabrid upwards, occasionally velvety hairy. Ligule a fringe of hairs. Blades flat, firm, finely and sharply pointed, often widening from a narrow base, mostly 20-40 cm long, up to 14 mm wide [2259] .

Height:

2.1 m-2.5 m to 3.6 m in Kenya [2075] .

Lifeform:

Stout reedlike [6590] .

IDENTIFICATION

E. pyramidalis is a variable species with some tendency to intergrade with its neighbours, though it can easily be recognised by its robust stature and plump awnless spikelets. In particular the spikelets are larger and more coarsely disposed along the raceme than in *E. haplocada*; the inferior lemma, when mucronate, is abruptly subulate rather than gradually tapering as in *E. stagnina* [3] .

The inflorescence is predominantly deep purple when mature, light purple and green when young. It is narrowly pyramidal in outline, sometimes dense, and is made up of a number of thick, dark spikelike racemes or shortly divided branches arranged singly, or partly in pairs, on a hairy, light green central axis. They decrease in length upwards. The spikelets are clustered along one side of the narrow, often long hairy branches. They are strongly flushed with or almost entirely dark purple, pointed, awnless, and rough on the margins, variously so on the surfaces, sometimes smooth or velvety. The ligule is a fringe of hairs, at least on the lower leaves, sometimes absent from the upper leaves [2259] .

FOOD - UNSPECIFIED PARTS

Vegetable:

Vegetable in Sudan [2075] .

FOOD - SEEDS

Seeds:

The grain is used for food in parts of Africa [2259] .

Famine food:

Regarded as a weed but grain is eaten in times of scarcity [2075] .

Seeds eaten "like sugar" (Nueyr) [2075] .

Famine food:

In Northern Nigeria the grains are eaten by the natives in times of scarcity [6590] .

Flour:

In Africa locally used as flour [5608] .

ANIMAL FOOD

Does not provide fodder in the dry season [2075] .

ANIMAL FOOD - AERIAL PARTS

Leaves, cattle:

In Mozambique, the form with hairy leaf-sheaths is said to irritate the mouths of cattle (Myre 1960) [2259] .

Horses, fodder:

Moshis cut it up and feed it to horses in Upper Volta [2075] .

Cattle, grazing:

Excellent grazing for cattle of rainy season. Towards end of season it gets too tall and coarse and is swamped [2075] .

Cattle, grazing:

Used for grazing by cattle, does not dry up when other grasses do [2075] .

Unspecified aerial parts, fodder, grazing:

Used as a pasture (natural or cultivated) [2182] .

Unspecified aerial parts, forage:

Widely regarded in tropical Africa as a good, palatable forage grass [2259] .

Unspecified aerial parts, game mammals, browse:

Much browsed by antelope and other of the larger herbivores [2259] .

Unspecified aerial parts, hay/straw:

It has been cultivated and is frequently used for hay [2259] .

Forage:

From West Africa reports have stated that it forms excellent forage, searched by all animals and much relished by stock [6590] .

In Kenya it is reported to be a pasture grass eaten by all animals [6590] .

MATERIALS - FIBRES

Thatch, huts:

Used for thatching huts by Kipsigis [2075] .

MEDICINES - RESPIRATORY SYSTEM DISORDERS

Seeds, humans, coughs, oral ingestion:

The Nueyr eat the seed for coughs [2075] .

ENVIRONMENTAL USES - UNSPECIFIED ENVIRONMENTAL USES

Waterlogged soils:

It occurs nearly always in wet frequently swampy situations and would possibly be a suitable grass for growing in such areas [6590] .

NUTRITIONAL VALUE

Aerial parts, carbonate of soda:

In Nigeria an impure salt or carbonate of soda is made by burning the grass (Smith 1966) [2259] .

CHEMICAL ANALYSES - MISCELLANEOUS

Unspecified parts, chemical analyses:

Flavone C glycosides, Tricin 5 glucoside, other tricin glycoside [2075] .

WEED PROBLEMS CAUSED

It occurs as a weed in rice fields [6590] .

CONSTRAINTS - MISCELLANEOUS

Mozambique:

In Mozambique, the form with hairy leaf-sheaths is said to irritate the mouths of cattle (Myre 1960) [2259] .

Southern Africa:

The form with hairy leaf-sheaths is unpleasant to handle as the hairs are easily rubbed off and cause considerable irritation (Chippendall 1955) [2259] .

ALTITUDE

South Tropical Africa:

0-1800 m [3] .

600-1860 m a.s.l. [2075] .

Tropical East Africa:

0-2400 m [1362] .

TOPOGRAPHY/SITES

Southern Africa:

Grows only in wet areas, such as swamps, vleis, seasonally flooded grassland, river banks and lake shores [2259] .
Along streams and lagoons not in open country [2075] .

Southern Africa:

Often floating in open water where it forms parts of the 'sudd' [2182] [2259] .

West Tropical Africa:

Throughout the area in or by water or in marshes, sometimes forming extensive meadows of inundation regions of the Niger and Lake Chad [1362] .

Lake edge (aquatic ever), marsh and river edges [2075] .

River banks in Kenya [2075] .

Swampy stream with *Schiza* sp. and *Oryza* sp. aquatic (N. Niger), semi-aquatic woodland with *Acacia seyal*, *Setaria* [2075] .

On river banks, grassy swamps and marshes, moist pastures and in ditches, streams and rivers [6590] .

SOILS

Sandy, sandy loam, black volcanic sand, alluvium, grey alkaline cracking clay [2075] .

VEGETATION

Southern Africa:

Fynbos, Savanna and Grassland [2182] .

Dry grassland habitat [2075] .

Kenya:

Associated with *Panicum maximum*, *Sporobolus*, *Cynodon plectostachyum* [2075] .

Uganda:

Themeda trandra swamp grassland [2075] .

FLOWERING/FRUITING/SEED SET

Flowering, southern Africa:

December to May [2182] [2259] .

Flowering, Upper Volta:

Anthers viable in May [2075] .

Fruiting:

December, January [2075] .

CYTOLOGY

For the genus $x = 9$ (highly polyploidy) [5150] .

HYBRIDISATION

The form with a linear inflorescence (*E. holubii*) is sympatric and intergrades with the large waterside form. It is more frequent towards the margins of the specie's geographical range and in drier habitats, suggesting that it is a response to stressful conditions rather than a distinct taxon [3] .

CULTIVATION

Southern Africa:

It has been cultivated and is frequently used for hay. Only the glabrous or smooth forms should be cultivated [2259] .

FIELD TRIALS

In Southern Rhodesia it has been grown experimentally but does not show any outstanding merit either for hay or pasture, it is said however to deserve further study [6590] .

ACKNOWLEDGEMENTS AND DATASHEET PROGRESS

Data transfered from SEPASAL Paper Files by Ruth Adeka, KENRIK, National Museums of Kenya, November 2005 .

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